

By the end of May the total available storage had been reduced by almost two-thirds, and, in view of the possibility of the adverse hydraulic conditions continuing until the seasonal spring rise about September, no alternative remained but to impose restrictions on the use of power. The Supply Authorities were instructed on the 30th May to reduce load. On the 4th June the Electricity Control (South Island) Order 1947 was gazetted, and on the following day the authorities concerned were directed to reduce the weekly consumption of units by 30 per cent. below consumption in the corresponding week of 1946. The Order gave the authorities power to limit load as they thought fit, with certain provisions relating to the maintenance of a sufficient supply of electricity for farming and certain other essential requirements.

The severity of the restrictions remained for a comparatively short time. A series of westerly depressions broke the drought, and the net allocations were increased progressively. By the 22nd August it became possible to advise the Supply Authorities that until further notice an increase of 3 per cent. above consumption in the corresponding period of 1946 could be met.

For the first quarter of 1948 the allocations were changed to the consumption of units in the corresponding weeks of 1947, plus 5 per cent.

The effect of short-term dry periods upon the power-supply emphasizes the necessity for pushing ahead with the hydro-electric works in hand without any avoidable delay. The emergency shortages of power may keep recurring during dry periods until the new stations are available to create a margin even during dry seasons.

In the meantime it is likewise necessary to have the willing co-operation of the consumers in order that the available power may be distributed where it is most needed, and so as to avoid interruptions to essential services, whether in the home, on the farm, or in industry. Only in this way can the effects of the shortage of power be tempered to the consumer.

NORTH ISLAND ELECTRIC-POWER SYSTEM

A. SYSTEM OPERATION AND LOAD DESPATCH

1. LOAD

The maximum half-hourly load on the system was 343,900 kW. This occurred on Wednesday, 2nd July, between 17.00 and 17.30 hours. Last year the half-hourly peak was 314,800 kW., on Monday, 18th November, 1946, between 17.00 and 17.30 hours.

The highest Saturday peak was 302,000 kW. between 17.30 and 18.00 hours on 19th July, 1947. Last year the half-hourly peak was 281,300 kW. between 17.30 and 18.00 hours on 8th June and 29th June, 1946.

The highest Sunday peak was 288,700 kW. between 12.00 and 12.30 hours on 10th August, compared with 267,900 kW. between 11.30 and 12.00 hours on 29th September last year.

The greatest weekly generation was 38,969,000 units on the week ending 24th August, 1947 (last year 35,630,000 units), an increase of 9.4 per cent. The maximum units on any one day was 5,969,000 (last year 5,567,000). This occurred on Wednesday, 29th